FIGURE 1

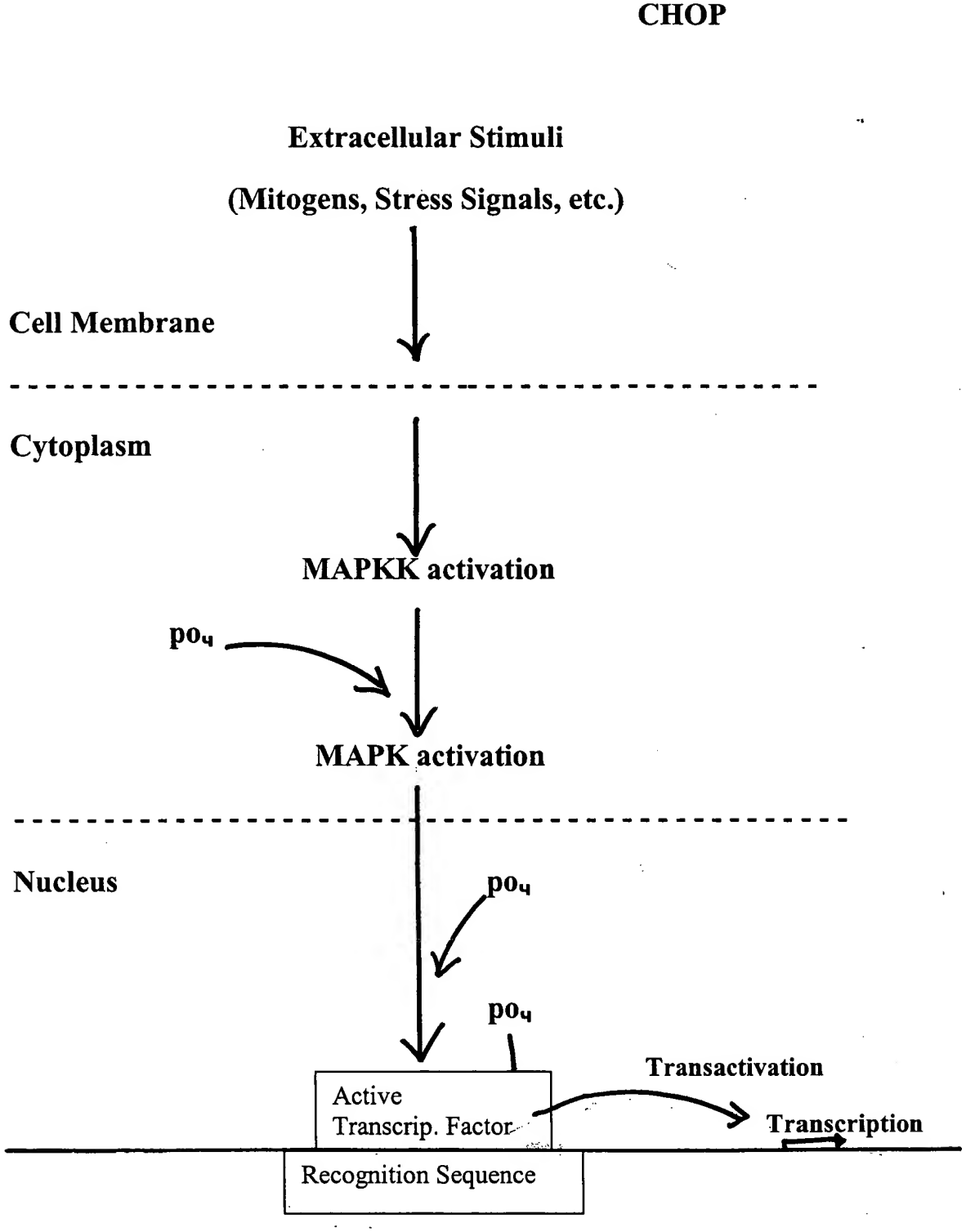


FIGURE 2

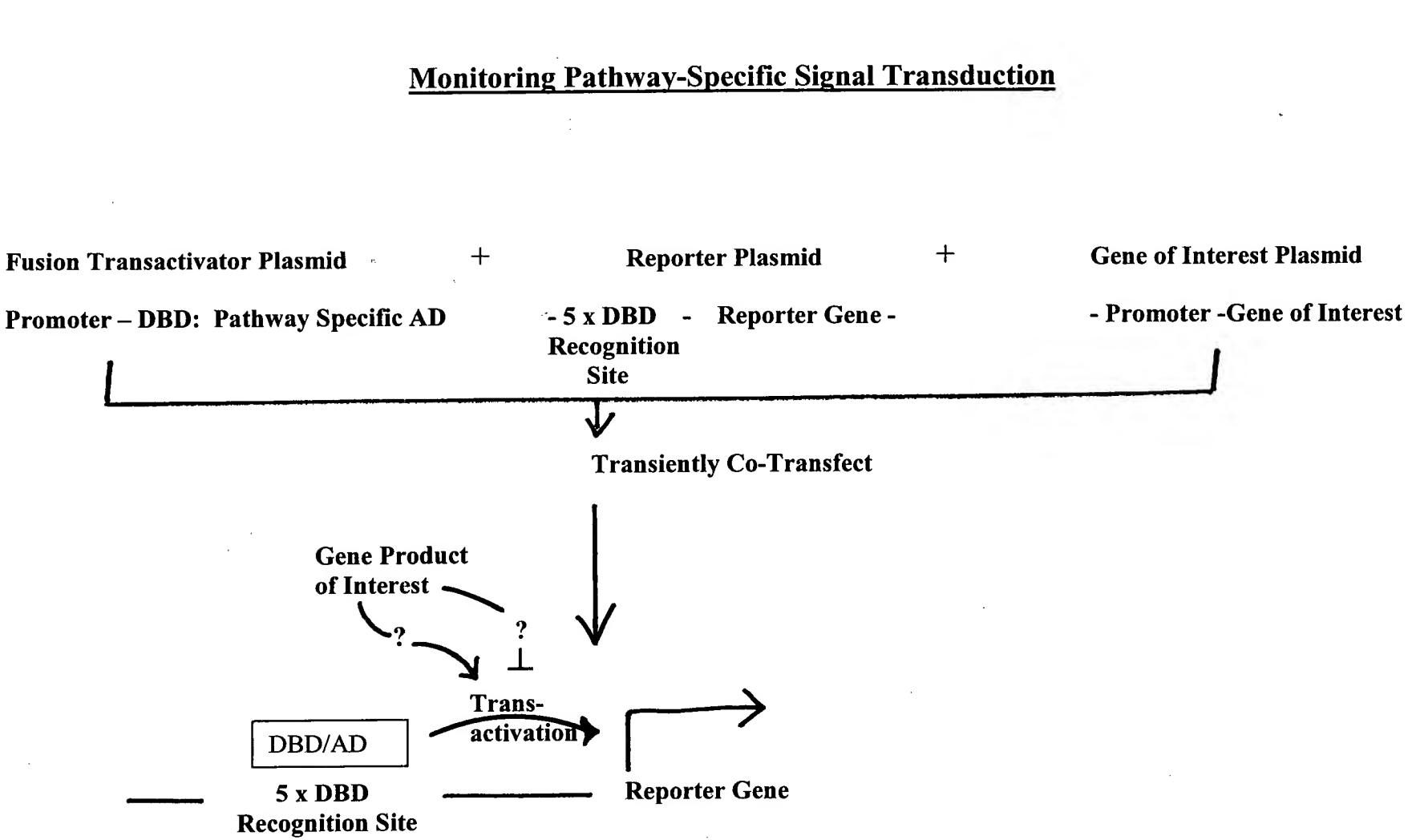


FIGURE 3

Selection of Stable Reporter Cell Lines

Reporter Construct (w/linked DBD element)

↓

Stably transfect

↓

Screen for clones with low background of Reporter activity and strong response to DBD – bearing activator(s)

↓

"Stable Reporter Cell Line"

↓

Stably transfect with fusion transactivator plasmid

↓

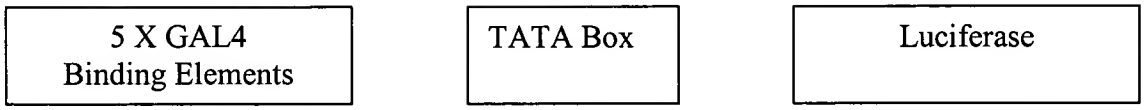
Screen for clones with strong response to pathway-specific upstream activator(s)

↓

"Pathway-Specific Stable Reporter Cell Line"

FIGURE 4

4.1.1. pFR-Luc Plasmid

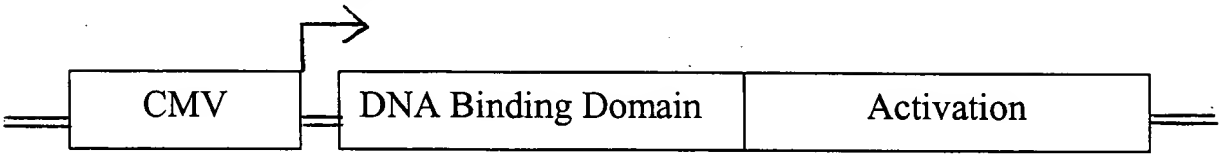


Sequence of GAL4 Binding Element in the pFR-Luc Plasmid

GT CGGACTACTGTCCTCCG AG CGGAGTACTGTCCTCCG SEQ ID NO:9
AG CGGAGTACTGTCCTCCG AG CGGAGTACTGTCCTCCG SEQ ID NO: 10
AG CGGAGTACTGTCCTCCG AG CGGAGACTCTAGAGGG SEQ ID NO: 11
TATATAATGGATCCCCGGGT AC CGAGCTCGAATTC - - SEQ ID NO: 5
--CAGCTTGGCATTCCGGTACTGTTGGTAAATG--Luciferase SEQ ID NO: 6

FIGURE 5

4.1.2. Fusion Transactivator Plasmids

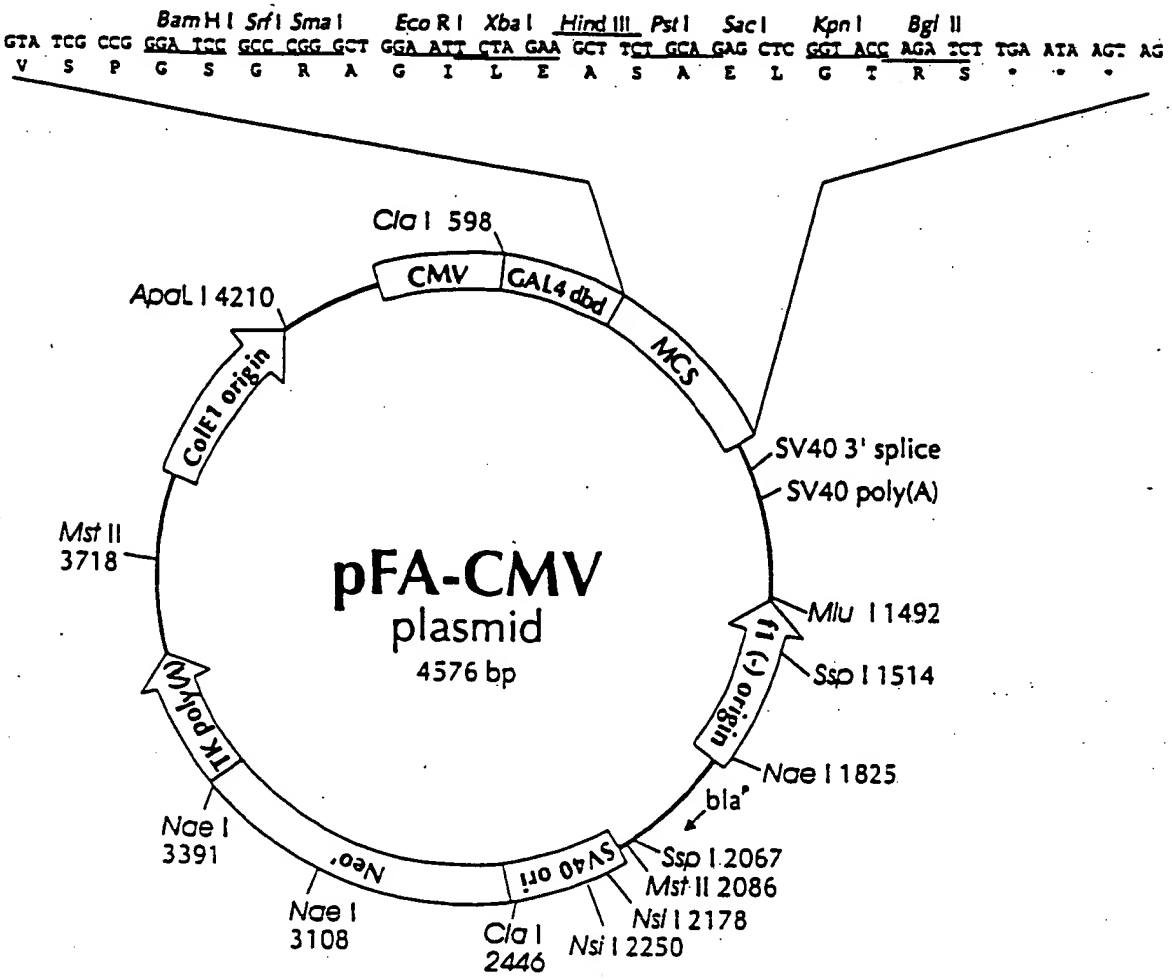


GAL4 (1.147)

c-Jun (1-223)
Elk1 (307-427)
CHOP (1-101)
CREB (1-283)

FIGURE 6

4.1.4. pFA-CMV Plasmid



4.2 Preparation of medium and reagents

Luciferase Asay Reagent (1 x)

- 40.0mM trucube (pH7.8)
- 0.5 mM ATP
- 10 mM $MgSO_4$
- 0.5 mM EDTA
- 10.0 mM DDT
- 0.5 MM coenzyme A
- 0.5 mM Luciferin

Cell Lysis Buffer (5 x)

- 40 mM tricine (pH 7.8)
- 50 mM NaCl
- 2 mM EDTA
- 1 mM $MgSO_4$
- 5 mM DTT
- 1% Triton® X-100

FIGURE 7

4.1.3. Control Plasmids

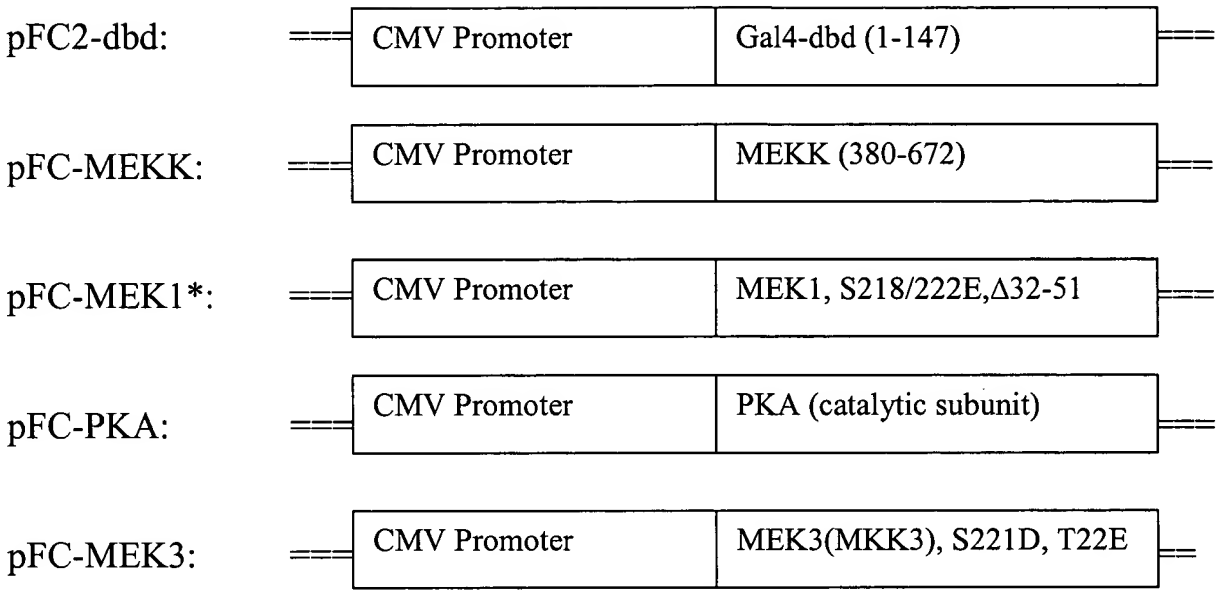


FIGURE 8

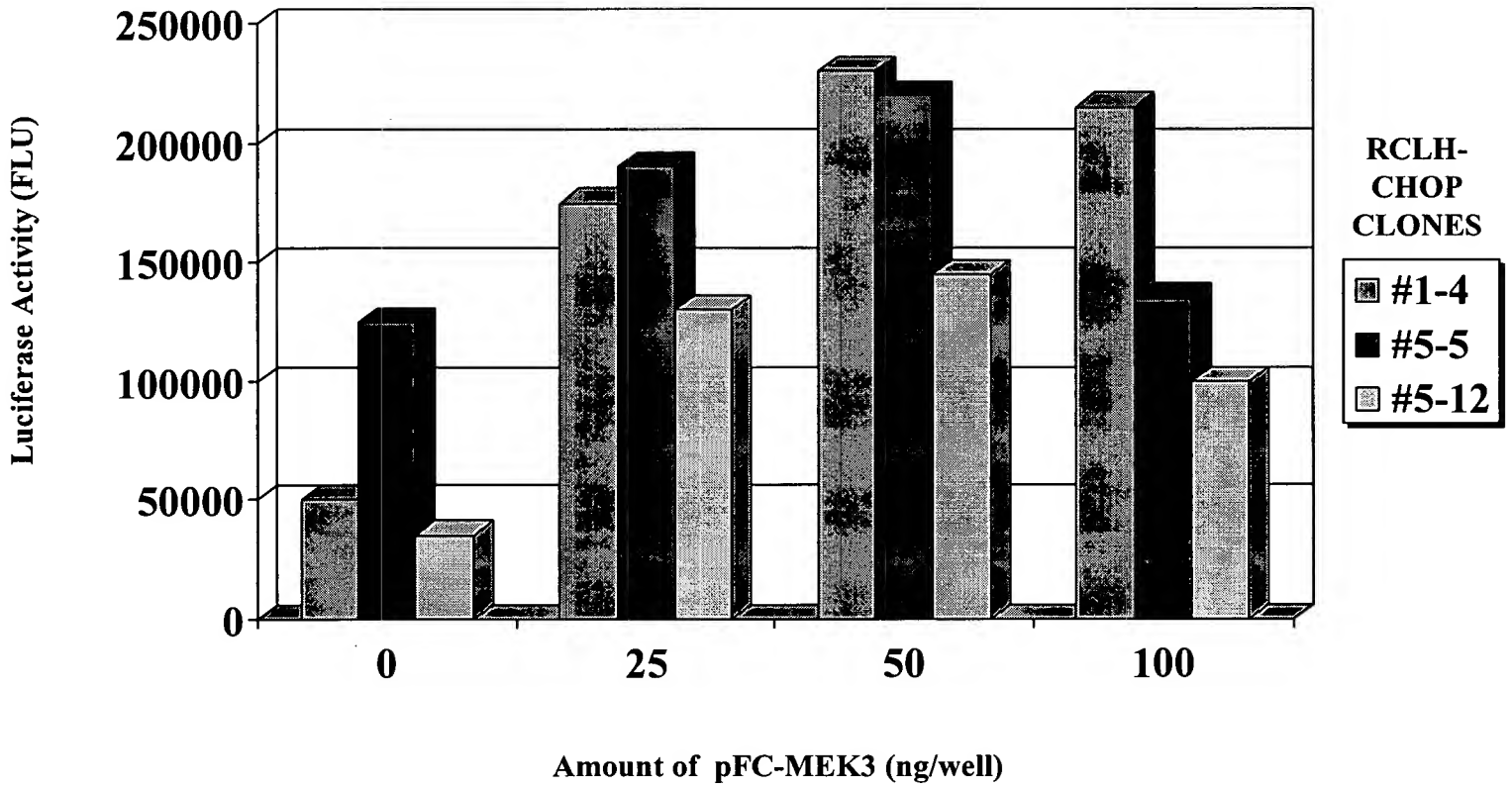


FIGURE 9

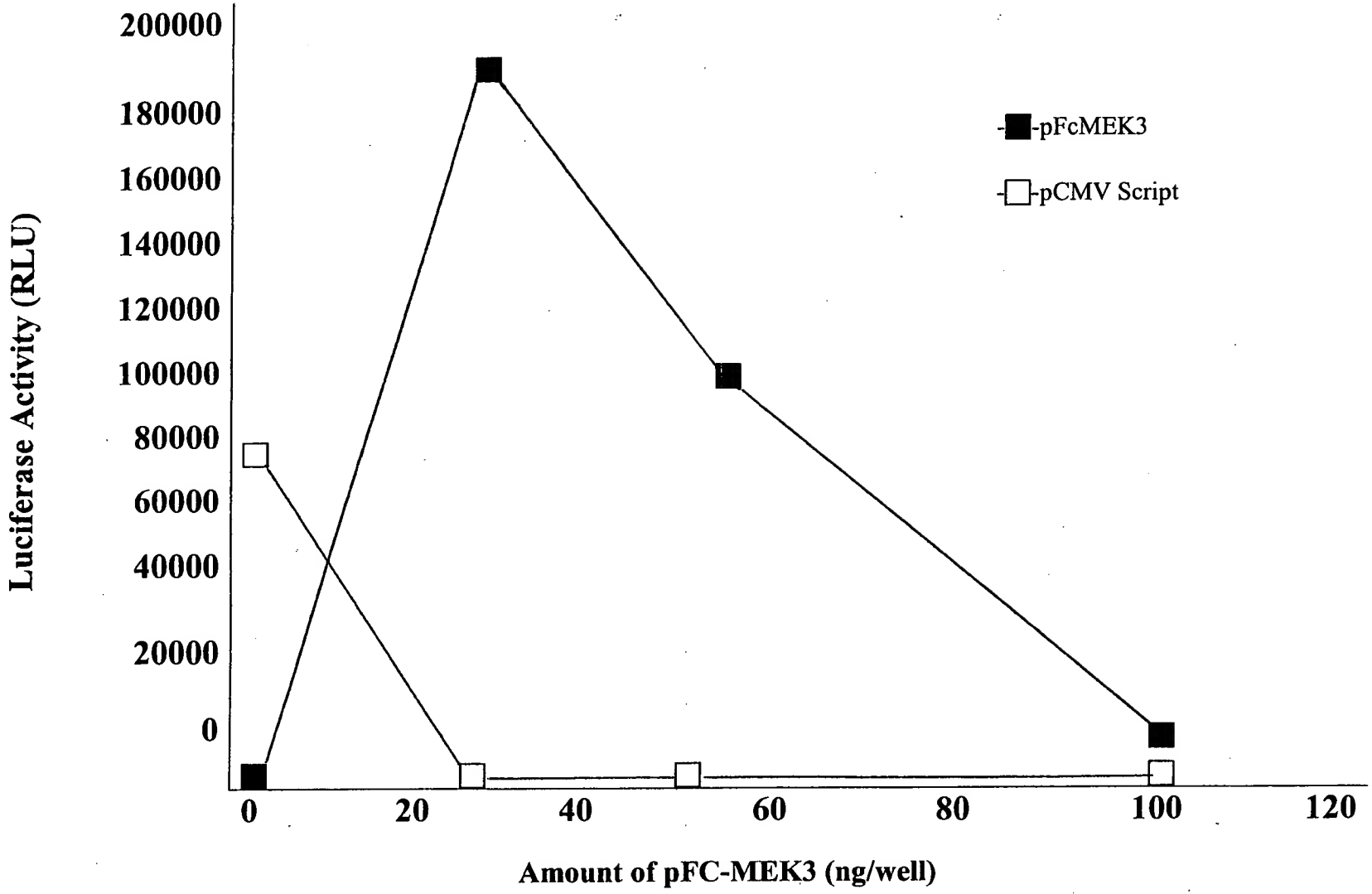


FIGURE 10